

### AMENDMENTS TO THE CLAIMS

Kindly amend the claims as follows:

1. (Currently Amended): A sintered scaffold material comprising ~~sintered~~ glass or ceramic fibers, ~~and~~ wherein the scaffold material has a porosity of between about 50 volume % and about 90 volume % is porous.

2. (Original): The scaffold of claim 1, wherein glass fibers comprise bioactive glass fibers.

3. (Original): The scaffold of claim 1 or 2, wherein the glass fibers are sintered together at a temperature from about 300 to about 1500 °C.

4. (Original): The scaffold of claim 1 or 2, wherein the glass fibers are sintered together at a temperature from about 600 to about 700 °C.

5. (Original): The scaffold of claim 1 or 2, wherein the glass fibers are sintered together at a temperature from about 630 to about 680 °C.

6. (Currently Amended): A sintered glass scaffold comprising ~~sintered~~ glass fibers, wherein the fibers have ~~having~~ a coating of one or more biocompatible polymers or copolymers.

7. (Original): The scaffold of claim 6, wherein the glass fibers comprise bioactive glass fibers.

8. (Original): The scaffold of claim 6 or 7, wherein the biocompatible polymer is selected from the group consisting of polyglycolide, polylactide, poly-β-hydroxybutyric acid, polydioxanone, polyvinylalcohol, polyesteramine, their copolymers and polymer blends thereof.

9. (Original): The scaffold of claim 6, wherein the coating has a thickness of about 1 to about 200  $\mu\text{m}$ .

10. (Original): The scaffold of claim 6, wherein the coating has a thickness of from about 5 to about 30  $\mu\text{m}$ .

11. (Original): The scaffold of claim 6, wherein glass fibers coated with a polymer are sintered at a temperature of about 50 to about 300  $^{\circ}\text{C}$ .

12. (Original): The scaffold of claim 6 wherein the glass fibers coated with a polymer are sintered at a temperature of about 100 to about 200  $^{\circ}\text{C}$ .

13. (Original): The scaffold of claim 1 or 6, wherein the glass fibers comprise bioactive glass having a composition of about 53 - about 60 wt-%  $\text{SiO}_2$ , about 0 - about 34 wt-%  $\text{Na}_2\text{O}$ , about 1 - about 20 wt-%  $\text{K}_2\text{O}$ , about 0 - about 5 wt-%  $\text{MgO}$ , about 5 - about 25 wt-%  $\text{CaO}$ , about 0 - about 4 wt-%  $\text{B}_2\text{O}_3$ , about 0,5 - about 6 wt-%  $\text{P}_2\text{O}_5$ , wherein  $\text{Na}_2\text{O}$  in combination with  $\text{K}_2\text{O}$  is present in an amount between about 16 - about 35 wt-%;  $\text{K}_2\text{O}$  in combination with  $\text{MgO}$  is present in an amount between about 5 - about 20 wt-% and  $\text{MgO}$  in combination with  $\text{CaO}$  is present in an amount between about 10 - about 25 wt-%.

14. (Original): The scaffold of claim 1 or 6, wherein the glass fibers comprise bioactive glass having a composition of about 53 wt-%  $\text{SiO}_2$ , about 6 wt-%  $\text{Na}_2\text{O}$ , about 12 wt-%  $\text{K}_2\text{O}$ , about 5 wt-%  $\text{MgO}$ , about 20 wt-%  $\text{CaO}$ , about 0 wt-%  $\text{B}_2\text{O}_3$  and about 4 wt-%  $\text{P}_2\text{O}_5$ .

15. (Original): The scaffold of claim 1 or 6, wherein the fibers prior to sintering have a length from about 2 to about 30 mm.

16. (Original): The scaffold of claim 1 or 6, wherein the fibers prior to sintering have a length from about 5 to about 15 mm.

17. (Original): The scaffold of claim 1 or 6, wherein the glass fibers are sintered for about 1 to about 120 minutes.

18. (Original): The scaffold of claim 1 or 6, wherein the glass fibers are sintered for about 5 to about 30 minutes.

19. (Original): The scaffold of claim 1 or 6, wherein the fibers prior to sintering have a diameter of about 0.010 - 1.0 mm.

20. (Original): The scaffold of claim 1 or 6, wherein the fibers prior to sintering have a diameter of about 0.030 - 0.300 mm.

21. (Currently Amended): The scaffold of claim [1 or] 6, wherein the scaffold has a the porosity of ~~the scaffold is~~ between about 5 volume % to and about 95 volume % vol-%.

22. (Currently Amended): The scaffold of claim [1 or] 6, wherein the scaffold has a the porosity of ~~the scaffold is~~ between about 50 volume % to and about 90 volume % vol-%.

23. (Original): The scaffold of claim 1, wherein the scaffold is a carrier for bioactive agents.

24. (Original): The scaffold of claim 6, wherein the scaffold is a carrier for bioactive agents.

25. (Original): The scaffold of claim 23, wherein the bioactive agent is selected from the group consisting of anti-inflammatory agents, antibacterial agents, antiparasitic agents, antifungal agents, antiviral agents, anti-neoplastic agents, analgesic agents, anaesthetics, vaccines, central nervous system agents, growth factors, hormones, antihistamines, osteoinductive agents, cardiovascular agents, anti-ulcer agents, bronchodilators, vasodilators, birth control agents, fertility enhancing agents and polypeptides.

26. (Original): The scaffold of claim 24, wherein the bioactive agent is selected from the group consisting of anti-inflammatory agents, antibacterial agents, antiparasitic agents, antifungal agents, antiviral agents, anti-neoplastic agents, analgesic agents, anaesthetics, vaccines, central nervous system agents, growth factors, hormones, antihistamines, osteoinductive agents, cardiovascular agents, anti-ulcer agents, bronchodilators, vasodilators, birth control agents, fertility enhancing agents and polypeptides.

27. (Original): The scaffold of claim 23, wherein the bioactive agent is bone morphogenetic protein.

28. (Original): The scaffold of claim 24, wherein the bioactive agent is bone morphogenetic protein.

29. (Original): The scaffold of claim 1 or 6, wherein the compressive strength of the scaffold is from about 5 to about 25 MPa.

30. (Original): The scaffold of claim 1 or 6 wherein the compressive strength of the scaffold is over 20 MPa.

31. (Original): The scaffold of claim 1, wherein the scaffold is attached to a biocompatible polymeric film.

32. (Original): The scaffold of claim 6, wherein the scaffold is attached to a biocompatible polymeric film.

33. (Original): The scaffold according to claim 31 or 32, wherein the biocompatible polymeric film comprises a polymer or polymers selected from the group consisting of polyglycolide, polylactide, poly- $\beta$ -hydroxybutyric acid, polydioxanone, polyvinylalcohol, polyesteramine, their copolymers and polymer blends thereof.

34. (Original): The scaffold of claim 1 or 6 is capable of promoting bone regeneration.

35. (Original): The scaffold of claim 1 or 6, wherein the fibers are sintered together under compressive load.

36. (Original): The scaffold of claim 1 or 6, wherein the fibers are sintered together in a mold form.

37. (Original): The scaffold of claim 1 or 6, wherein the fibers form a mat which is attached to a membrane.

38-49 (withdrawn)